DIY Short Radiant Edge

3/8" Instructions & Installation Guide

The new **DIY Radiant Edge Series System** from Inspired LED allows contractors and customers to build their own elegant low-voltage fixtures in-field. Simply combine aluminum channels, lenses, and end caps with your choice of 12V or 24V flexible LED strips to create the perfect lighting solution for any application!

inspired LED

<u>System Components:</u> See product spec sheets for more info.

3/8" Short Radiant Edge Lens Cover (SKU# 3771-W) Designed to conceal and diffuse our 12V or 24V LED flex strips with 3.5mm Plug-in or Micro-Lock Tiger Paw[®] connectors. Sold in six foot lengths.

Radiant Edge Aluminum (SKU# 3662)

Wide enough to contain our 12V (8mm), 24V (10mm), or Double Row LED flex strips. Sold in six foot lengths.

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12V or 24V LED Flexible Strips (SKU#s vary)

These long lasting, energy-efficient light options provide a dense light output in a variety of color temperatures and brightness levels. Best results with Ultra or Mega bright product.



12V or 24V DC Plug in Power Supply or Hardwire Transformer (SKU#s vary)

Use with 12V or 24V flexible LED strips for a clean, consistent source of power to your lights. Combine with compatible controllers or dimmer switches.



3.5mm Tiger Paw® (SKU 4938- sold in pairs) Provides solderless termination of 12V –
24V LED flex strips. Compatible with
Inspired LED cables & other 3.5 x
1.3mm inputs.



Micro Lock Tiger Paw[®] Connector (SKU# 3613) Provides solderless termination of 12V – 24V LED flex strips. Compatible with 16-22AWG <u>solid</u> wire.



Radiant Edge Series Short 3/8" End Caps Input hole (SKU# 3772) No input hole (SKU# 3773) Used to finish the ends of 3/8" Radiant Edge Panels. Screws included.



Radiant Edge Series Mounting Clips (SKU# 3739) Used to mount completed Radiant Edge panels. Sold in packs of ten, screws included.

Instructions:



Additional Materials:

- Measuring Tape
- □ A sharp pair of dikes or hand clippers
- □ Wire Strippers (if using Micro-lock)
- □ Super Glue (if desired)
- □ Phillip's head screw driver for installation



Step 1: To build, begin by measuring available space for completed Radiant Edge panel.



Step 2: Determine necessary length of LED strip by taking total available space and subtracting 2" for each connector needed. *If using a connector on one side, subtract 2" total. If using a connector on both sides, subtract 4" total.*



Step 3: Use scissors to cut along copper pads located closest to subtracted measurement without going over.



Step 4: Prepare to attach Tiger Paw[®] or Micro-lock Tiger Paw[®] by peeling back adhesive lining from LED strip, and pulling open black sliding latch.



Step 6: Insert LED flex between black latch and bridge connector, then slide latch closed. *If using standard Plug-in Tiger Paws®, ensure polarity of connectors is matched to the polarity of the strip.*



Step 7: Use power supply to test strip functionality. If lights do not turn on, double check that polarities are properly matched. Repeat steps 4-7 to add connectors to opposite sides of flex.



Step 9: Use dikes to cut aluminum to length as close as possible to the end of the Tiger Paw[®] connector. Snip each raised edge, and bend aluminum back and forth until fully separated.



Step 6: If using Micro-lock Tiger Paw[®], identify the polarity as marked along the strip- this will determine polarity of wiring. *Positive wire will align with positive side of LED flex strip.*



Step 8: Remove adhesive backing from LED strip and Tiger Paw[®] connectors. Carefully align first connecter with end of aluminum channel and adhere strip along the center.



Step 10: Measure and cut plastic lens to length. For easiest cut, use dikes to snip each edge, then gently bend plastic back and forth until fully separated.



Step 11: If using Micro-lock Tiger Paws[®], select desired 16-22AWG solid cable and strip back ends about 1/4" of an inch. Feed wire through end caps before matching polarity and inserting into Micro-locks. Check for functionality before proceeding.



Step 13: To install, secure Radiant Edge panel onto desired surface using screw holes on end caps. Or if preferred, end cap tabs may be bent and removed, and mounting clips used for support every 12".



Step 15: If using Micro-lock Tiger Paws[®], run cables back to power supply and make connection using wire nuts.



Step 12: If using plug-in Tiger Paws[®] (or once Microlock has been wired up), snap lens onto aluminum and slip desired end caps onto each side. A dab of super glue may be used to secure caps in place if desired.



Step 14: If using plug-in Tiger Paws[®], simply insert 3.5mm x 1.3mm plugs from Inspired LED cables or power supplies into female input jacks.



Step 16: Follow corresponding instructions to incorporate switches, dimmers, power supplies and transformers for a complete LED system. See Mega Bright power charts for information on wattage and voltage drop.